

The invention claimed is:

1. A method for delivering a plurality of reactor monoliths into an interior of a reactor, comprising:

extending at least one tubular member into an interior of a reactor such that a first end of the at least one tubular member is located near an opening in the reactor, and a second end of the at least one tubular member is inserted into the interior of the reactor, said tubular member having an outer wall defining an interior space adapted to allow sliding movement of a reactor monolith therethrough, and a plurality of engagement members located within the interior space of the at least one tubular member and spaced along a length thereof, each engagement member actuatable between an extended position and a retracted position; and

controlling the plurality of engagement members such that each engagement member actuates between the extended position, thereby preventing sliding movement of the monolith through the tube, and the retracted position, thereby allowing the monolith to slide past the engagement member within the tube.

2. The method of claim 1, wherein the controlling step includes controlling the members in a sequential manner, thereby slowly moving the monoliths along the length of the tube and preventing a continuous free-fall descent.
3. The method of claim 2, wherein the controlling step further includes controlling said engagement member via a controller.
4. The method of claim 2, wherein the controlling step further includes controlling said engagement member via a gas containing logic circuit.

5. The method of claim 1, wherein said at least one tubular member in said extruding step includes a plurality of tubular members linked together in an end-to-end orientation.
6. The method of claim 1, wherein the engagement members in said extruding step includes a plurality of expandable bladders, and the step of controlling the engagement members includes inflating and deflating the bladders.
7. An apparatus for delivery of reactor monoliths into an interior space of a reactor, comprising:
at least one tubular member having an outer wall defining an interior space adapted to allow sliding movement of a reactor monolith therethrough, a first end adapted to be located near an opening in a reactor, and a second end adapted to be inserted into an interior space of the reactor;
a plurality of engagement members located within the interior space of the at least one tubular member and spaced along a length thereof, each engagement member actuatable between an extended position, wherein the engagement member extends into the interior space and is adapted to prevent sliding movement of the monolith through the tube, and a retracted position, wherein the engagement member is retracted towards the outer wall, thereby allowing the monolith to slide past the engagement member within the tube; and
a controller operably coupled to the engagement members for controlling the engagement members in a sequential manner, thereby allowing the monoliths to be slowly moved along the length of the tube and preventing a free-fall descent.
8. The apparatus of claim 7, wherein the controller includes an air logic circuit.

9. The apparatus of claim 7, wherein each engagement member includes an expandable bladder.
10. The apparatus of claim 7, wherein each engagement member includes at least one pin member.
11. The apparatus of claim 10, wherein the pin member is flexibly resilient.
12. The apparatus of claim 7, wherein the at least one tubular member includes a plurality of tubular members linked end-to-end.
13. A method of packaging reactor monoliths to facilitate the delivery thereof into an interior space of a reactor, comprising:
 - connecting a plurality of monoliths in a linear fashion to a support member, thereby creating a chain of linked-together containers and allowing the chain of containers to be lowered into an interior space of a reactor.
14. The method of claim 13, wherein the step of connecting the containers includes connecting the monoliths together with at least one length of flexible cord.
15. The method of claim 13, further comprising packaging the monoliths within a container, and the containers are connected to the support member.
16. The method of claim 15, wherein the packaging step includes shrink wrapping the at least one reactor monolith.

17. The method of claim 15, further including:

assembling a plurality of reactor monoliths together prior to the step of packaging.

18. The method of claim 15, wherein the packaging step includes hermetically sealing the at least one reactor monolith into the container.